



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,260	03/01/2002	Tomotaka Koketsu	1055-02	2943
35811	7590	03/09/2006	EXAMINER	
IP GROUP OF DLA PIPER RUDNICK GRAY CARY US LLP 1650 MARKET ST SUITE 4900 PHILADELPHIA, PA 19103			BEFUMO, JENNA LEIGH	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/070,260		KOKETSU ET AL.	
	Examiner		Art Unit	
	Jenna-Leigh Befumo		1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 13, 2006 has been entered.

Response to Amendment

2. The Amendment submitted on January 13, 2006, has been entered. Claims 3 – 14 have been cancelled. Claims 1 and 2 have been amended. Therefore, the pending claims are 1 and 2.

3. The 35 USC 103 rejection based on Fastenau et al. (6,037,047) is withdrawn since Fastenau et al. did not teach the number of residual entanglements or residual oil content now included in amended claim 1.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 07-252740A (English Translation).

The features of JP '740 have been set forth in the previous Office Action. Claim 1 has been amended to include the limitations of claims 3 – 6 and 10. Previously JP '740 was relied on to reject claims 1, 2, 4 – 6, and 10 – 14. Thus, the rejection did not address the limitations with respect to the horizontal index of the filaments within the yarn, which is addressed below.

Art Unit: 1771

Claim 1 has been amended to require that the fabric is made with a flattened fiber which is aligned such that the horizontal index (HI), as defined by the disclosure, is at least 0.75. This feature measures the alignment of the flattened fibers in respect to the horizontal direction of the fabric. The highest HI is 1, where all the fibers run parallel to the horizontal direction of the fabric and the lowest HI is 0, where all the fibers run perpendicular to the horizontal direction of the fabric. JP 07-252740A discloses that the major axis of the single yarn should be placed parallel to the flat surface (or horizontal direction) of the fabric to decrease the gaps in the woven fabric, thus suppressing air permeability, or to produce a set air permeability from a lighter fabric, when compared to a fabric made from round fiber (page 10, paragraph 18). Thus, JP 07-252740A teaches that to maximize the advantage gained by using flattened fibers, one must make the fibers parallel or as close to parallel as possible. Therefore, it would have been obvious to one having ordinary skill in the art to optimize the HI of the fabric taught by JP 07-252740A to have a HI of greater than 0.75 to increase the air permeability of the fabric made from flattened fibers to the greatest extent or to decrease the overall weight, as well as thickness, of the fabric to the greatest extent. Thus, claims 1 and 2 are rejected.

6. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fastenau et al. (6,147,017).

The limitations added to claim 1, were previously included in claims 3 – 14, which were rejected by Fastenau et al. Thus, newly amended claims 1 and 2 are rejected for the reasons set forth in the previous Office Action.

Response to Arguments

Art Unit: 1771

7. Applicant's arguments filed January 13, 2006 have been fully considered but they are not persuasive. The applicant argues that the rejection based on JP '740 did not teach the subject matter of claim 3, which has now been added to claim 1. However, as set forth above the limitations with respect to horizontal index have been included in the rejection. Thus, the rejection is maintained.

8. The applicant argues that the rejection based on Fastenau et al. relies on too many modifications to produce the claimed product (response, pages 5 – 6). However, the modifications set forth in the rejection are suggested by the prior art and would be within the routine skill of the art. Further, the applicant has provided no evidence that these modifications would not be within routine skill of the art, or that the applicant's claimed range produces any unexpected results.

With respect to the limitation of air permeability, this feature is a result of the woven fabric structure which is claimed by the applicant and taught by the prior art. Hence, since the prior art teaches the claimed fabric structure, the prior art would also inherently have the claimed permeability properties and this would not need to be modified. Further, Fastenau et al. also directly suggests the claimed horizontal index, even though, Fastenau et al. does not define in the same manner as the applicant. Specifically, Fastenau et al. teaches that the fiber shape is chosen so that the filaments will tend to arrange themselves in a desired tile arrangement which has the yarns laying in approximately the same orientation (column 5, lines 10 – 60). Finally, the modifications related to the number of entanglements and residual oil content are limitations that are within the general skill level of the art to select or optimize. Thus, the prior art does not

Art Unit: 1771

require an unreasonable amount of modification to produce the claimed product. Therefore, the rejection is maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jenna-Leigh Befumo
March 5, 2006